

REMARKS

After entry of the foregoing amendments, claims 1-18 are pending in this application. New claims 17 and 18 are added via this Amendment.

35 U.S.C. §103:

Claims 1-16 are rejected under 35 U.S.C. §103(a) as being anticipated by Kuwabara (U.S. Patent No. 6,065,136) in view of Wookey (U.S. Patent No. 6,085,244). Applicants respectfully traverse the rejection in view of the following remarks.

The present invention is drawn to a novel and unobvious data transmission system and method for at least one of remote maintenance and diagnosis of an automation system. This is done by using a first transmit/receive device to send a first e-mail message to an automation system. A second transmit-receive device receives the first e-mail message and uses an instruction decoder to transmit the instruction to an application of the automation system.

Kuwabara is cited for an alleged disclosure of a device that uses e-mail to send an instruction and receive diagnostic results. The Examiner asserts that Kuwabara teaches the claimed invention except for the additional use of a firewall, for which Wookey is cited. Applicants submit that the present invention provides features that would not have been taught or suggested by Kuwabara and Wookey; thus, a *prima facie* case of obvious has not been established.

Applicants submit that one skilled in the art would not have been taught an automation system as in the present invention based only on the teaching of the user's computer and maker's computer in Kuwabara. In particular, one skilled in the art of automation systems would have understood upon reading the application that an automation system is a complex system in the field of manufacturing or process automation that includes automation devices for production and process control, such as motors, sensors, actuators, etc., which are linked via a bus system (e.g. field bus, profibus, ...) to each other and/or to PLCs (Programmable Logic Controllers). As also would have been understood, an automation system typically has an HMI (Human Machine Interface) in order to operate and monitor the automation system and the automation devices locally at the location of the automation system. "Standard" PCs may be part of the automation system, but are not necessarily needed.

An exemplary reference in which an automation system including sensors, actuators, etc., which are linked via a bus system is described in US 20010052041-A1 (see description (0003) and Fig. 2). As would be appreciated, in the environment of automation systems it is often desired to have access to the automation system from a remote side in order to control or change process values of the system or devices, or to get actual process information from the automation system and its devices. Such a remote control and monitoring of the automation system has previously required a special data connection from a remote location to the automation system and its devices. However, the present invention makes it possible to "communicate" with the

automation system via e-mail without a special bus system. It would also have been understood that there is a difference between an “active” instruction command to control and operate an automation system, such as presently disclosed, e.g., to start a motor, and a “passive” command for diagnosis a computer, e.g., to get certain data as in the applied art.

Furthermore, claims 1, 13 and 16 describe that the instruction decoder automatically identifies the instruction in the first e-mail message and transmits the instruction to an application of the automation system. Applicants previously argued that Kuwabara does not automatically transmit or forward an instruction to an application of an automation system. The Examiner has not given weight to this aspect because he contends that this feature is not claimed. (See Response to Arguments, pages 5-6 in the Office Action.) Thus, claims 1, 9, 13, 15 and 16 are amended to further define this feature as being done automatically.

The Examiner acknowledges that the diagnostic program in Kuwabara is manually executed by the user. (See lines 1-3, page 5 of the Office Action.) This is because the maker of Kuwabara must manually create an e-mail program, and then the user (i.e., a person) must manually open the program and respond with the necessary information. A person who must manually perform these functions would not have taught or suggested the features regarding the inventive automatic forwarding or transmitting of instructions to an automation system, in combination with the other claimed features.

In contradistinction, the disclosure of Kuwabara would have taught one to send a diagnostic program to a user so that the user can manually open up the program and run the diagnostic testing, and manually return the results to the maker. However, there is no device disclosed in Kuwabara that includes an instruction decoder that automatically identifies an instruction contained in an e-mail from the maker followed by the automatic transfer of such instruction to an application of an automation system. Thus, even if the disclosure of Kuwabara were combined with the teachings of Wookey, the claimed features would not have been taught or suggested. Accordingly, Applicants respectfully submit that claims 1-16 are not obvious in light of Kuwabara and Wookey, and request that the rejection under 35 U.S.C. §103(a) be withdrawn.

CLAIM 16:

In the Amendment dated December 29, 2003, Applicants presented new claim 16 to further define the invention by reciting features that emphasized the field of technology. Claim 16 also provides a focus on bi-directional communication between the remote user and the applications of the automation system. It is submitted that the features of claim 16 would not have been taught nor suggested by the applied references. For example, claim 16 describes that the instruction sent by the first transmit/receive device is at least one of to control, operate and monitor the application of the automation system. Moreover, claim 16 describes that the second transmit/receive device is configured to receive result information generated by the application

and send the result information in a second e-mail message to the first transmit/receive device of the remote user.

The Examiner has not specifically established a *prima facie* case of obviousness in regard to claim 16. Instead, the grounds of rejection merely state the claim 16 (along with claims 9-15) are rejected for the “same reasons as set forth in claims 1-8 above.” (See page 4, third full paragraph.) However, it is pointed out that independent claim 16 (along with claims 9-15) are not of the exact same scope as claims 1-8 and cannot properly be rejected based on the “same” reason. It is requested that claim 16 be allowed for the pertinent reasons listed above or a new action be provided that includes “clearly developed” grounds of rejection of record, as required by MPEP §706.07.

NEW CLAIMS:

Applicants add new claims 17 and 18 to obtain more varied protection for the invention, and submit that their features would have been neither taught nor suggested by the applied references at least by virtue of their respective dependencies on claim 1.

In view of the preceding amendments and remarks, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue that the Examiner feels may be best resolved through a personal or telephonic

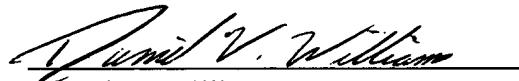
AMENDMENT UNDER 37 C.F.R. §1.116
U.S. SERIAL NO. 09/839,419

ART UNIT 2685
Q63542

interview, the Examiner is kindly requested to contact the undersigned attorney at the local telephone number listed below.

The USPTO is directed and authorized to charge all required fees (except the Issue/Publication Fees) to our Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: July 7, 2004